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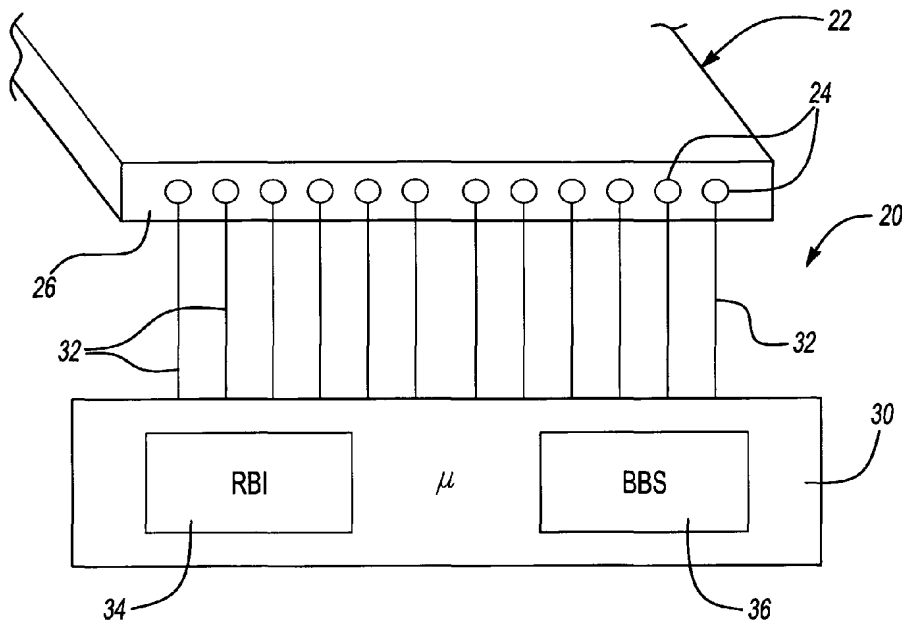
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(54) Title: ELEVATOR LOAD BEARING MEMBER WEAR AND FAILURE DETECTION



(57) Abstract: An elevator load bearing member (22) monitoring device (20) has a controller (30) that applies a first signal (40) and a second signal (50) to at least one tension member (24) in the belt. The first signal (40) in one example has a plurality of pulses (42) of a selected amplitude and duration. The second signal (50) includes a series of pulses (52) having a second, shorter duration and lower amplitude. The first signal is useful for providing information regarding a wear condition of the load bearing member. The controller utilizes a response to the second signal to determine a failure condition such as a broken load bearing member.

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